

FHWA REGION NO	STATE	FED. AID PROJ. NO	SHEET NO.	TOTAL SHEETS
3	MD.	SEE TITLE SHEET		

Intersection Operation

The existing phasing, cabinet, and controller are to be utilized.

Construction Details

- A. Existing cabinet/controller to be utilized.
- B. Use existing handhole.
- C. Use existing conduit.
- D. Install handhole.
- E. Install 1 in. liquid tight, on-metallic conduit for loop detector sleeve.
- F. Install 2 in. polyvinyl chloride (Schedule 40) electrical conduit – trenched.
- G. Install 4 in. polyvinyl chloride (Schedule 80) electrical conduit – slotted.
- H. Install 12 in. x 30 ft. steel strain pole with 10 ft. luminaire arm, and 250 watt HPS luminaire(Note: one 2 in., 90-degree (Schedule 40) PVC bend). [Use four 1-3/4 in. x 90 in. anchor bolts.]
- J. Install 6 ft. x 30 ft. quadrupole type vehicle loop detector (2-4-2 turns).
- K. Install 3/8 in. steel span wire, 1/4 in. tether wire, vehicle signal heads, and relocated sign as shown (Note: Provide approximately 50 feet of additional electrical cable for each signal head for use during roadway construction phasing).
- L. Use existing span wire, install vehicle signal heads, and relocate existing sign as shown.
- M. Use existing span wire and relocate existing sign, install polycarbonate signal heads as shown. Temporarily bag existing vehicle signal heads.
- N. Remove existing span wire and all attached equipment.
- O. Install 24 in. preformed white pavement marking for stop line.
- P. Use existing strain pole.
- Q. Install 3/8 in. steel span wire, 1/4 in. tether wire, vehicle signal heads, and relocated sign as shown.
- R. Use existing loop detector sleeve.
- S. Use existing handhole and splice new loopwire to existing 2-conductor aluminum shielded cable.
- T. Temporarily disconnect existing loop detector.

Equipment List "B"

Equipment to be furnished and/or installed by the Contractor.

Quantity	Unit	Description
1	CY	Test pit excavation.
100	LF	24 in. preformed white pavement marking for stop line.
1	EA	30 ft. steel strain pole.
1	EA	Handhole.
580	LF	Sawcut for signal loop detector.
1675	LF	Loop detector wire (No. 14 A.W.G.) encased in flexible tubing.
175	LF	2-conductor (aluminum shielded)electrical cable (No. 14 A.W.G.).
125	LF	2-conductor electrical tray cable (No. 12 A.W.G.).
125	LF	5-conductor electrical cable (No. 14 A.W.G.).
1150	LF	7-conductor electrical cable (No. 14 A.W.G.).
10	LF	Bare copper ground wire (No. 6 A.W.G.).
225	LF	1/4 in. tether wire.
225	LF	3/8 in. steel span wire.
30	LF	1 in. liquid tight, flexible, non-metallic conduit for loop detector sleeve.
10	LF	2 in. polyvinyl chloride (Schedule 40) electrical conduit – trenched.
50	LF	4 in. polyvinyl chloride (Schedule 80) electrical conduit – slotted.
3	CY	Concrete foundation for signal equipment.
1	EA	Ground rod – 3/4 in. diameter x 10 ft. length.
1	EA	10 ft. Luminaire arm with 250 watt HPS luminaire.
11	EA	Install traffic signal head – span wire mount.
LS	LS	Removal of existing traffic signal equipment.
28.5	SF	Relocate existing sheet aluminum signing – overhead mount.
3	EA	Temporarily bag existing traffic signal head.

Equipment List "C"

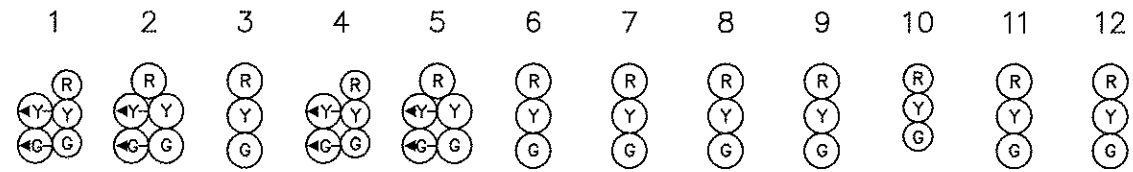
Equipment to be removed by the contractor and delivered to the MCDOT Systems Technical Center, 1283 Seven Locks Road, Building "C", Rockville MD 20852. A twenty-four (24) hour notice is required prior to delivery. Contact Mr. Emil Wolanin at (301) 217-2208.

Quantity	Unit	Description
6	EA	Traffic signal head.

Equipment List "A"

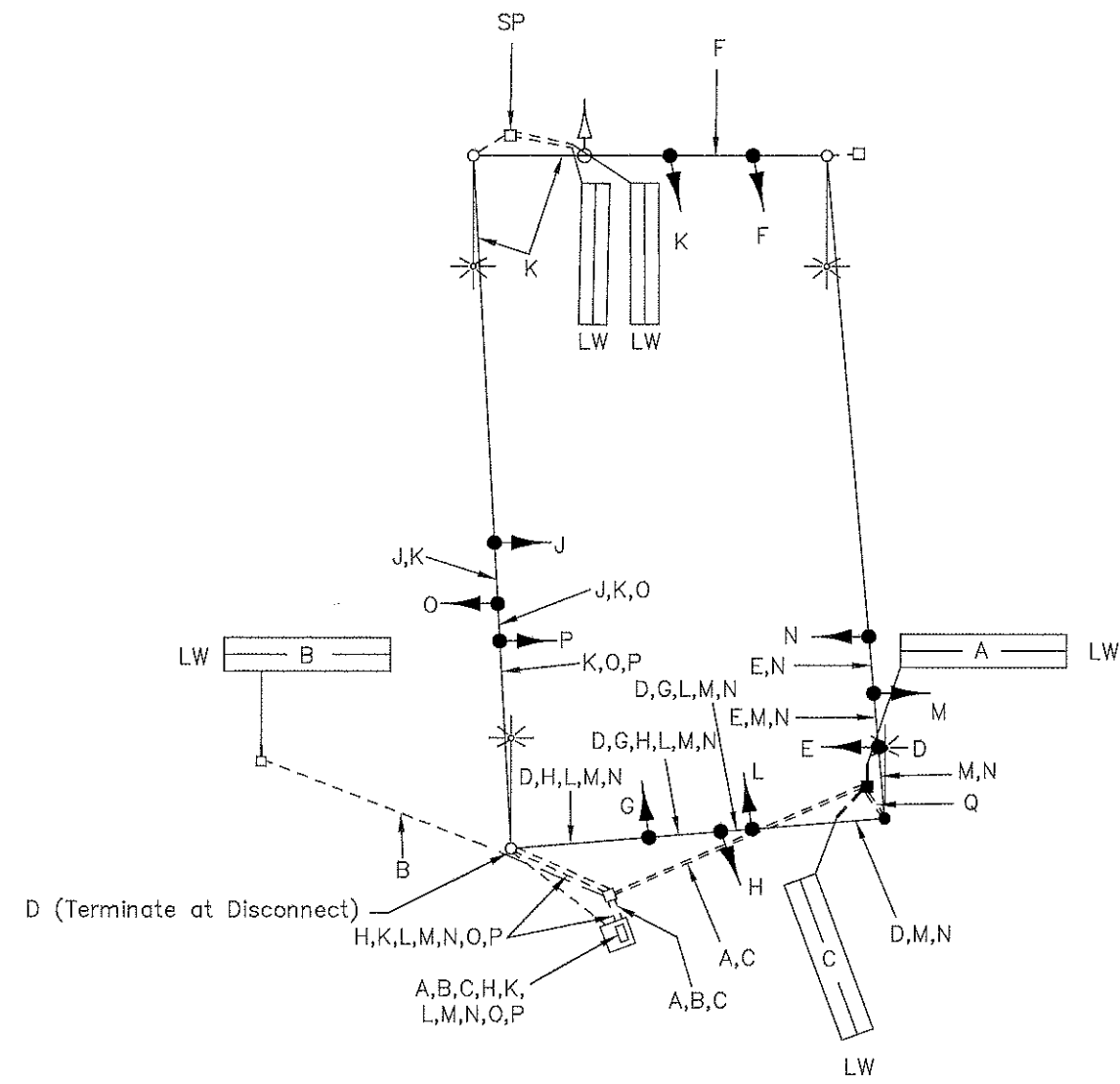
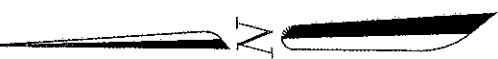
Equipment to be supplied by the SHA.

Quantity	Unit	Description
1	EA	8 in./12 in., one-way, five section (8 in. R,Y,G/12 in. YA,GA) adjustable traffic signal head – span wire mount.
6	EA	12 in., one-way, three section (R,Y,G) adjustable traffic signal head – span wire mount.
1	EA	12 in., one-way, five section (R,Y,YA,G,GA) adjustable traffic signal head – span wire mount.
1	EA	12 in., one-way, three section (R,Y,G) polycarbonate adjustable traffic signal head – span wire mount.
1	EA	12 in., one-way, five section (R,Y,YA,G,GA) polycarbonate adjustable traffic signal head – span wire mount.
1	EA	8 in./12 in., one-way, five section (8 in. R,Y,G/12 in. YA,GA) polycarbonate adjustable traffic signal head – span wire mount.



Phase 1 & 5	R	R	R	R	R	R	R	R	R	R	R	R	R
1 & 5 Change To Phase 1 & 6 or Phase 2 & 5	G	G	G	G	G	G	G	G	G	G	G	G	G
Phase 1 & 6	G	G	G	R	R	R	R	R	R	R	R	R	R
1 Change	G	G	G	R	R	R	R	R	R	R	R	R	R
Phase 2 & 5	R	R	R	G	G	G	R	R	R	R	R	R	R
5 Change	R	R	R	G	G	G	R	R	R	R	R	R	R
Phase 2 & 6	G	G	G	G	G	G	R	R	R	R	R	R	R
2 & 6 Change	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	R
Phase 4 & 8	R	R	R	R	R	R	G	G	G	G	G	G	G
4 & 8 Change	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y	Y
Flashing Operation	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R

Phase Chart



- A } 2-Conductor Cable (Aluminum Shielded)
- B }
- C }
- D — 2-Conductor Tray Cable (No.12 A.W.G.)
- E } 5-Conductor Cable (No.14 A.W.G.)
- F }
- G }
- H }
- J }
- K }
- L }
- M }
- N } 7-Conductor Cable (No.14 A.W.G.)
- O }
- P }
- Q — Bare Copper Stranded Ground Wire (No. 6 A.W.G.)
- LW — LoopWire (No.14 A.W.G.) In Flexible Tubing
- SP — Splice Existing Aluminum Shielded Cable to New Loopwire

Wiring Diagram

Maintenance of Traffic
Phase 1, Stage 3

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Revision 'A'	REVISIONS	APPROVALS	MDOT — STATE HIGHWAY ADMINISTRATION <i>Office of Traffic & Safety</i> TRAFFIC ENGINEERING DESIGN DIVISION	
		CHIEF, SIGNAL DESIGN SECTION	DRAWN BY: <u>N/A</u>	
		ASST. DISTRICT ENGINEER, TRAFFIC	DES. BY: <u>S. Renzi</u>	
		CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION	CHK. BY: <u>N/A</u>	
	November 6, 1995 Rebuild to new geometrics. S.H.A. No. M-611-501-371	DIRECTOR, OFFICE OF TRAFFIC & SAFETY	DATE: <u>N/A</u> SCALE: <u>N/A</u>	F.A.P. NO. <u>N/A</u> S.H.A. NO. <u>N/A</u>
			MD 355 at Gunners Branch Rd/ Fox Chapel S.C.	
			COUNTY: MONTGOMERY	
			TS/STD. NO. 3395A-X3-GI	
			SHEET NO. _____ OF _____	